

SUPPORT FOR THE AMENDMENT

This Amendment amends Claims 1 and 5. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 1, 4-8 and 11-15 and 22-24 will be pending in this application. Claims 1, 5, 7, 11, 14, 22, 23 and 24 are independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

The present invention provides a resin coated metal sheet in which a magnetic coating film containing a magnetic powder is coated on at least one surface of a metal sheet. The resin coated metal sheet provides excellent microwave absorbability and workability.

Specification at abstract; page 10, lines 23-25.

Claims 1 and 4 are rejected under 35 U.S.C. 102(b) over U.S. Patent Application Publication No. US 2003/0094076 A1 ("Hosoe").

Hosoe discloses a method of producing a fine alloy powder, and electromagnetic shielding materials that use the alloy powder. Hosoe at [0002]; [0013]. An example of the alloy powder is permalloy, which contains nickel and iron, is extremely high in magnetic permeability, excels as a soft magnetic material, is highly conductive, and is favorably used in magnetic shield materials. Hosoe at [0005]; [0029]. Hosoe discloses that the fine alloy powder can be dispersed in various resins and used in the form of molding material. Hosoe at [0041]. The fine alloy powder can also be mixed with binders to form a slurry, and the slurry can be spray molded to form an alloy coating. Hosoe at [0042].

The Final Rejection asserts that Hosoe discloses an alloy coating on a metal sheet:

Hosoe teaches alloy powders and product applying said powders (title) comprising a dispersion of 50 weight% in solids of a Ni-Fe alloy powder in water dispersible polyester (para 0078), said dispersion coated onto inner parts of frames (**metal sheet**) of notebook personal computers and after drying (solid), said coating achieved a film thickness of 30  $\mu\text{m}$  (para 0084-0086). Final Rejection at page 3, section 5, lines 3-7 (underlining in original, bold emphasis).

On the contrary, Hosoe discloses:

[0084] The dispersion obtained in the example 3 described above and the polyether-imide solution obtained in the example 4 were respectively loaded into air sprays and coated onto the **inner parts of the frames of notebook personal computers** so that the film thickness would be of a prescribed value upon drying. Hosoe at [0084].

However, Hosoe is silent about the composition of the frames of notebook personal computers onto which Hosoe's proposes to spray the dispersion obtained in example 3 (of Ni-Fe alloy powder, water dispersible polyester, water and homogenizer).

The frames of notebook personal computers are made of resin or plastic, and not from metal sheet. Notebook personal computers are designed to minimize weight, and metal sheet adds undesirable and unnecessary weight in comparison with resin or plastic.

Because the frames of notebook personal computers are made of resin or plastic, which transmit electromagnetic waves, use on the frames of Hosoe's coating containing soft magnetic powder is particularly important to provide electromagnetic shielding.

Hosoe fails to disclose or suggest the independent Claim 1 limitation of a "resin coated **metal sheet**".

Thus, the rejection under 35 U.S.C. 102(b) over Hosoe should be withdrawn.

Claims 5-6 are rejected under 35 U.S.C. 103(a) over KR 2003-0010506 ("Watase") in view of U.S. Patent No. 5,455,116 ("Nagano").

Claims 7-8 are rejected under 35 U.S.C. 103(a) over Watase in view of Hosoe.

Claims 11-13 are rejected under 35 U.S.C. 103(a) over Watase in view of Hosoe and in further view of U.S. Patent No. 5,945,218 ("Nakao").

Claims 14-15 are rejected under 35 U.S.C. 103(a) over Watase in view of Hosoe and in further view of Nakao.

Claim 22 is rejected under 35 U.S.C. 103(a) over Watase in view of Nagano.

Claim 23 is rejected under 35 U.S.C. 103(a) over Watase in view of Nagano and in further view of Nakao.

Claim 24 is rejected under 35 U.S.C. 103(a) over Watase in view of Nagano and in further view of Nakao.

Watase discloses a coated body usable as the cabinet of an electronic device, the coated body attaining a reduction in the temperature inside of the electronic device (improved thermal radiation property) and having excellent electric conductivity. The coating body has a substrate covered on both sides with thermal radiative coatings. The excellent electric conductivity is achieved by adding to the coatings a conductive filler such as Ag, Zn, Fe, Ni and Cu; and metal compounds such as FeP.

However, Watase is silent about microwave absorbability. Watase's focus on improved thermal radiation property and electric conductivity shows that Watase did not intend for the thermal radiative coatings to contain a magnetic powder, but rather an electrically conductive powder. Watase is silent about a magnetic powder that can absorb microwaves, and fails to suggest the limitation of independent Claims 5, 22, 23 and 24 that "the magnetic powder is soft magnetic ferrite powder"; the limitation of independent Claims 7, 11 and 14 that "the magnetic powder is permalloy".

The secondary references fail to remedy the deficiencies of Watase.

Nagano discloses an electromagnetic wave reflection-preventing material that can include ferrite particles dispersed into a resin. Nagano at abstract; column 3, lines 48-51.

As discussed above, Hosoe discloses a fine alloy powder, such as permalloy, and electromagnetic shielding materials that use the alloy powder.

Nakao is silent about magnetic powder.

However, because Watase relates to thermal characteristics and not to electromagnetic characteristics, there is no motivation to combine Watase with Nagano, Hosoe, and Nakao.

For the same reason, there is no reasonable expectation that the combination of Nagano, Hosoe, and Nakao with Watase would have led the skilled artisan to the soft magnetic powders utilized in the present invention.

Because there is no motivation to combine Nagano, Hosoe, and Nakao with Watase, and there is no reasonable expectation of success, the cited prior art fails to suggest the limitation of independent Claims 5, 22, 23 and 24 that "the magnetic powder is soft magnetic ferrite powder"; and the limitation of independent Claims 7, 11 and 14 that "the magnetic powder is permalloy". Thus, the rejections under 35 U.S.C. 103(a) over Watase, variously in view of Nagano, Hosoe, and Nakao, should be withdrawn.

Claims 1 and 4 are rejected under 35 U.S.C. 112, first paragraph. In addition, Claims 5-6 are rejected under 35 U.S.C. 112, first paragraph. To obviate the rejections, independent Claims 1 and 5 are amended by deleting the term "solid".

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon



Corwin P. Umbach, Ph.D.  
Registration No. 40,211